

Exhibit 1

Copy of Declaration of Parry John Guilford, Ph.D.



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application

Inventor(s): Parry Guilford et al.

SC/Serial No.: 10/565,068

Confirm. No.: 3673

Filing Date: July 13, 2006

Title: MARKERS FOR DETECTION OF GASTRIC
CANCER

PATENT APPLICATION

Art Unit: 1643

Examiner: Alana Harris

Customer No. 66936

DECLARATION OF PARRY JOHN GUILFORD, PH.D.

I, Parry John Guilford, declare:

1. I am a citizen of New Zealand.
2. I am a co-inventor of the above-captioned United States Patent Application.
3. I obtained a BSc degree in 1981, a MSc degree in 1983 from the University of Otago, Dunedin, New Zealand and a Ph.D. degree from Cambridge University, Cambridge, UK in 1989.
4. Currently I am Research Director, Pacific Edge Biotechnology Limited, and Associate Professor and Principal Investigator, Cancer Genetics Laboratory, University of Otago.
5. I have made numerous presentations, including invited lectures to internationally recognized conferences.
6. I am author or co-author on over 60 book chapters, review articles, and peer-reviewed articles in leading journals including topics relating to cancer and cancer diagnosis/prognosis.
7. I am or have been a member of several recognized organizations dealing with cancer and oncology.
8. My research includes gene expression profiling, human genetics and susceptibility to genetic disorders, cancer diagnostics and cancer biology.
9. I am an inventor listed on 9 patents or patent applications.
10. A copy of my Curriculum Vitae is attached to this Declaration as Appendix 1.
11. I have reviewed the Office Action and am familiar with the prior art cited in the Office Action.
12. In my opinion, none of the prior art discloses the subject matter claimed in this application and therefore that the uses of the claimed markers for detection of gastric cancer are novel. This opinion is based on the fact that the references cited in the Office Action do not disclose the use of the claimed markers for detection of gastric cancer.

13. It is my opinion that the prior art teaches use of some markers useful for detecting certain cancer types, including colon cancer, large intestine cancer, small intestine cancer, breast cancer, xenografted tumors and cancer stem cells.

14. However, the cited references do not teach use of those markers in the detection of gastric cancer.

15. In contrast with the cited references, the instant invention disclosed several genetic markers useful for diagnosing gastric cancer. These discoveries are, in my opinion completely novel and not obvious to persons of skill in the art.

16. In my opinion, a person of skill in the art has an advanced degree in biological science and experience with laboratory methods, including genetic methods.

17. In my opinion, persons of skill in the art would not be able to identify particular marker profiles for previously unstudied diseases without actual experimentation. This opinion is based on the lack of predictability of particular markers being useful for detecting unrelated cancers. Not all cancers have the same profile of markers. Therefore, use of markers may be successful in detecting cancer in breast tissue, stem cells, xenograft tumors, colon cancer, large intestinal cancer, or small intestinal cancer yet would not be successful in detecting other cancers, including gastric cancer without direct experimentation.

18. In my opinion, the differences between the instant invention and the prior art is too large to be overcome by a person of ordinary skill in the art at the time the application was filed using only routine methods. A person of skill in the art would not be able to select from among the thousands of potential markers and select those that are applicable to a newly studied cancer type.

19. Additionally, the instant application discloses unexpected features of the claimed markers. We found that the markers, cystatin 1,2 &4 (CST 1,2 &4), are expressed in gastric tumor tissue with over 25,000 fold maximal expression compared to non-tumor tissue (FIG. 3). FIG 5(b) also demonstrates a totally unexpected finding, that CST 1,2 &4 can completely separate gastric tumor tissue from non-tumor tissue. Similar unexpected findings are reported for LOXL2 (FIG. 5(f)), SFRP4 (FIG. 5(h)), SPARC (FIG. 5(i)), SPP1 (FIG. 5(j)), THBS2 (FIG. 5(k)), and TIMP1 (FIG. f(l)). These degrees of separation of gastric tumor tissue and non-cancerous tissue is totally unexpected based on the prior art, and such unexpected results would not be apparent to a person of skill in the art based on tumors in other tissues.

20. For the reasons stated herein, in my opinion, a person of ordinary skill would not have been able to achieve the claimed results disclosed in this application based on teachings of the prior art.

21. All statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under §1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Respectfully submitted,

Date: April 1, 2009

By: 
Parry John Guilford

Appendix 1

Copy of Curriculum Vitae of

Parry John Guilford, MSc, Ph.D.

CURRICULUM VITAE

Parry John Guilford

Pacific Edge Biotechnology Ltd
Centre for Innovation
University of Otago
P.O. Box 56
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Qualifications

| | | | |
|-----------------|------|-------------|------|
| BSc (Otago) | 1981 | MSc (Otago) | 1983 |
| PhD (Cambridge) | 1989 | | |

Present Position

- Research Director, Pacific Edge Biotechnology Ltd.
- Associate Professor / Principal Investigator, Cancer Genetics Laboratory, University of Otago.

Employment History

- Senior Research Fellow, Cancer Genetics Laboratory, University of Otago; 1996-2001.
- Scientist, HortResearch CRI, Auckland; 1994-1996.
- Postdoctoral Fellow, Unité de Génétique Moléculaire Humaine, Institut Pasteur, Paris; 1991-1994.
- Scientist, DSIR, Plant Protection; 1989-1991.
- Scientist, DSIR, Plant Diseases Division; 1983-1986.

Distinctions

- Inaugural speaker, Auckland Regional Cancer Network meeting, September 2008.
- Member De Gregario Family Foundation scientific advisory board, **New York**, 2008.
- British Journal of Surgery Lecture; British Association of Surgical Oncology Annual Scientific Meeting, Royal College of Surgeons, **London**, November 2007.
- Plenary Speaker-Global Trends in Cancer Research, **Tokyo**, July 2004.
- Richard Gelb Award; IVth Gastric Cancer Congress, **New York** 2001. Awarded for contribution to the understanding of the biology of gastric cancer.
- Invited Speaker, Novartis Science and Medicine series, 1998.
- Pharmacia & Upjohn Award (oncology), 1998.
- New Zealand Lottery Board Repatriation Scholarship, 1994.
- DSIR Overseas Study Award, 1986.

Professional Affiliations/Memberships

- President New Zealand Society for Oncology (2007-2009)
- Chair New Zealand Inherited Gastric Cancer Group
- Member, Royal Society of New Zealand
- Past Member BioSouth-Executive (2005-2007)
- Member Australasian Gastro-intestinal Trials Group
- Member International Testicular Cancer Linkage Consortium
- Council Member Gastric Cancer Congress
- Steering committee member Inherited Gastric Cancer Linkage Consortium (Cambridge).
- Editorial Board of Cancer Science (formerly Japanese Journal of Cancer Research).

Research Activities

- Gene expression profiling
- Human genetics: inherited susceptibility to genetic disorders

- Cancer diagnostics
- Cancer biology

PUBLICATIONS

Refereed Publications: (total: 64)

Book Chapters

1. Gastric Cancer: recent advances. Chapter: hereditary diffuse gastric cancer. Guilford, P, Humar, B and Blair V. 2008. Minerva Med, Turin, Italy.
2. WHO classification of Tumours: Tumours of the digestive system; chapter: gastric carcinoma; P. Guilford; eds Stanley Hamilton and Lauri Aaltonen; IARC press Lyon 2000.
3. Dunbier, A.K. and Guilford, P.J. Gastric Cancer: inherited predisposition. The encyclopedia of cancer. 2002.

Invited Refereed Reviews

4. Humar, B and Guilford P. (2009). Hereditary Diffuse Gastric Cancer: a Manifestation of Lost Cell Polarity. Cancer Science (accepted).
5. Humar, B. and Guilford, P. Hereditary Diffuse Gastric Cancer and Lost Cell Polarity: A Short Path to Cancer (2008). Future Oncology, 4, 229-239.
6. Guilford, P, Blair, V, More, H and Humar, B. (2007). A short guide to hereditary diffuse gastric cancer. Hereditary Cancer in Clinical Practice, 5(4), 183-194.
7. Graziano, F, Humar, B. and Guilford, P. The role of the E-cadherin gene (CDH1) in diffuse gastric cancer susceptibility: from the laboratory to clinical practice (2003). Ann Oncol 2003 14: 1705-1713.
8. Dunbier, A. and Guilford, P. Hereditary Diffuse Gastric Cancer. Advances in Cancer Research. 83, 55-65 (2001).
9. Guilford, P. E-cadherin downregulation in cancer: fuel on the fire? Mol. Med. Today 5, 172-177 (1999).
10. Guilford, P. The inherited susceptibility to cancer Mol. Cell Life Sciences. 57: (4) 589-603 (2000).

Refereed journal articles

11. Zou, D., Yoon, H-S., Perez, D., Weeks, R., Guilford, P. and Humar, B. Epigenetic silencing in non-neoplastic epithelia identifies E-cadherin (CDH1) as a target for chemoprevention of lobular neoplasia. (2009) J. Path (accepted).
12. Humar, B; Blair, V; Charlton, A; More, H; Martin, I, Guilford, P. E-cadherin deficiency initiates gastric signet-ring cell carcinoma in mice and man. (2009). Cancer Res. In press.
13. Mai, L and the Testicular Cancer Linkage Consortium. The International Testicular Cancer Linkage Consortium: a clinopathologic descriptive analysis of 461 familial malignant testicular germ cell tumor kindred. (2009). Urol. Oncol. In press

- ## Parry Guilford, curriculum vitae

26. Blair, V., Martin, I., Shaw, D., Winship, I., Kerr, D., Arnold, J., Harawira, P., McLeod, M., Parry, S., Charlton, A., Findlay, M., Cox, B., Humar, B., More, H., Guilford, P. Hereditary Diffuse Gastric Cancer: diagnosis and management. (2006) *Clinical Gastroenterology and Hepatology*, 4(3):262-275.
27. Crockford, G., Linger, R., Hockley, S., Dudakia, D., Johnson, L., Huddart, R., Tucker, K., Friedlander, M., Phillips, K-A., Hogg, D., Jewett, M., Lohynska, R., Daugaard, G., Richard, S., Chompret, A., Bonaiti-Pellie, C., Heidenreich, A., Albers, P., Olah, E., Geczi, L., Bodrogi, I., Ormiston, W., Daly, P., Guilford, P., Fossa, S., Heimdal, K., Tjulandin, S., Liubchenko, L., Stoll, H., Weber, W., Forman, D., Oliver, T., Einhorn, L., McMaster, M., Kramer, J., Greene, M., Weber, B., Nathanson, K., Cortessis, V., Easton, D., Bishop, D., Stratton, M. and Rapley, E. (2006). Genome wide linkage screening for testicular germ cell tumour susceptibility loci. *Human Mol. Genet.* 15, 443-451.
28. Nathanson, K., Kanetsky, P., Hawes, R., Vaughn, D., Letrero, R., Tucker, K., Friedlander, M., Phillips, K-A., Hogg, D., Jewett, M., Lohynska, R., Daugaard, G., Richard, S., Chompret, A., Bonaiti-Pellie, C., Heidenreich, A., Olah, E., Geczi, L., Bodrogi, I., Ormiston, W., Daly, P., Oosterhuis, J., Gillis, A., Looijenga, L., Guilford, P., Fossa, S., Heimdal, K., Tjulandin, S., Liubchenko, L., Stoll, H., Weber, W., Rudd, M., Huddart, R., Crockford, G., Forman, D., Oliver, D., Einhorn, L., Weber, B., Kramer, J., McMaster, M., Greene, M., Pike, M., Cortessis, V., Chen, C., Schwartz, S., Bishop, T., Easton, D., Stratton, M. and Rapley, E. (2005). The y deletion GR/GR and susceptibility to testicular germ cell tumor. *Am. J. Hum. Genet* 77, 1034-1043.
29. Shaw, D., Blair V., Framp, A., Harawira, P., McLeod, M., Guilford, P., Parry, S., Charlton, A., Martin, I. (2005). Chromoendoscopic Surveillance in Hereditary Diffuse Gastric Cancer: an Alternative to Prophylactic Gastrectomy? *Gut*, 54, 461-468.
30. Charlton, A., Blair, V., Shaw, D., Parry, S., Guilford, P and Martin I.G. (2004). Hereditary diffuse gastric cancer: predominance of multiple foci of signet ring cell carcinoma in distal stomach and transitional zone. *Gut*, 53, 814-820.
31. Graziano, F., Arduini, F., Ruzzo, A., Bearzi, I., Humar, B., Silva, R., Muretto, P., Guilford, P., Testa, E., Mari, D., Magnani, M., Scartozzi, M., Berardi, R., Catalano, V. and Cascinu, S. Prognostic analysis of E-cadherin gene (*CDH1*) promoter hypermethylation in patients with surgically-resected, node-positive, diffuse gastric cancer. *Clinical Cancer Research*, 10, 2784-2789.
32. Rapley, E.A., Hockley, S., Warren, W., Johnson, L., Huddart, R., Crockford, G., Forman, D., Leahy, M.G., Oliver, D.T., Tucker, K., Friedlander, M., Phillips, K-A., Hogg, D., Jewett, MAS., Lohynska, R., Daugaard, G., Richard, S., Heidenreich, A., Geczi, L., Bodrogi, I., Olah, E., Ormiston, W.J., Daly, P.A., Looijenga, L.H.J., Guilford, P., Aass, N., Fosså, S.D., Heimdal, K., Tjulandin, S.A., Liubchenko, L., Stoll, H., Weber, W., Einhorn, L., Weber, B.L., McMaster, M., Greene, M.H., Bishop, D.T., Easton, D., Stratton, M.R. (2004) Somatic mutations of KIT in familial testicular germ cell tumours. *British Journal of Cancer*, 90, 2397-401.
33. Da Silva Tatley, F., Aldwell, F.E., Dunbier, A.K., and Guilford, P.J. A putative heterozygote advantage associated with germline E-cadherin mutations. *Infection and Immunity*, 71, 1580-1583 (2003).
34. Humar, B., Graziano, F., Cascinu, S., Catalano, V., Ruzzo, A., Magnani, M., Toro, T., Burchill, T., Futschik, M., Merriman, T. and Guilford, P. Association of CDH1 haplotypes with susceptibility to sporadic diffuse gastric cancer. *Oncogene*, 21, 8192-5 (2002).
35. Humar, B., Toro, T., Graziano, F., Müller, H., Dobbie, Z., Kwang-Yang, H., Eng, C., Hampel, H., Gilbert, D., Winship, I., Parry, S., Ward, R., Findlay, M., Christian, A., Parry Guilford, curriculum vitae

- Tucker, M., Tucker, K., Merriman, T. and Guilford, P. Novel germline *CDH1* mutations in hereditary diffuse gastric cancer families. *Human Mutation*, 19, 518-525 (2001).
36. Pharoah, P.D.P., Guilford, P., Caldas, C. and the International Gastric Cancer Linkage Consortium³ Incidence of gastric cancer and breast cancer in E-cadherin mutation carriers from hereditary diffuse gastric cancer families. *Gastroenterology* 121, 1348-1353 (2001).
 37. Chun, Y-S.; Lindor, N.M., Smyrk, T.C., Bret T. Petersen, B. T. , Burgart, L.J., Guilford, P.J. and Donohue, J.H. Germline E-cadherin Gene Mutations: Is Prophylactic Total Gastrectomy Indicated? *Cancer*. 92, 181-187 (2001).
 38. Grady, W.M., Willis, J., Guilford, P.J., Dunbier, A.K., Toro, T.T., Lynch, H., Wiesner, G., Ferguson, K., Eng, C., Park, J-G., Kim, S-J. & Markowitz, S. (2000). Methylation of the *CDH1* promoter as the second genetic hit in hereditary diffuse gastric cancer. *Nature Genetics*, 26, 16-17.
 39. Park, J-G., Yang, H-K., Kim, W-H., Caldas, C., Yokota, J. and Guilford, P.J. (2000). Report on the First Meeting of the International Collaborative Group on Hereditary Gastric Cancer (ICG-HGC). *J Natl Inst. Cancer*. 92, 1781-1782.
 40. Guilford, P.J., Hopkins, J.B.W., Grady, W.M., Markowitz, S.D., Willis, J., Lynch, H., Rajput, A, Wiesner, G.L., Lindor, N.M., Burgart, L.J., Toro, T.T., Lee, D., Limacher, J-M., Shaw, D.W., Findlay, M.P.N. and Reeve, A.E. E-cadherin germline mutations define an inherited cancer syndrome dominated by diffuse gastric cancer. *Human Mutation*, 14, 249-255 (1999).
 41. Shinmura, K., Kohno, T., Takahashi, M., Sasaki, A., Ochiai, A., Hunter, A., Guilford, P.J., Reeve, A.E., Sugimura, H., Yamaguchi, N. and Yokota. Familial gastric cancer: clinicopathological characteristics, RER phenotype, and germline p53 and E-cadherin mutations. *Carcinogenesis*, 20, 1127-1131 (1999).
 42. Gardner, R.J.M., Gaff, C.L., Macrae, F.A., St John, J.B., Hopkins, J.B.W., Guilford, P.J. and Reeve, A.E. E-cadherin unlikely to be a common 'low penetrance' gene for colorectal cancer. *Am. J. Med. Genet.* 84, 169-171 (1999).
 43. Choi, K-L., Guilford, P.J., McNoe, L.A., French, M.C. and Eccles M.R. Absence of *PAX2* gene mutations in patients with primary familial vesicoureteric reflux. *J. Med. Genet.* 35, 338-339 (1998).
 44. Guilford, P., Hopkins, J., Harraway, J., McLeod, M., McLeod, N., Harawira, P., Taite, H., Scoular, R., Miller, A. and Reeve, A.E. E-cadherin mutations in familial gastric cancer. *Nature*, 392, 402-405 (1998).
 45. Taylor, R., Guilford, P., Clark, R., Hale C. and Forster, R. Detection of *Erwinia amylovora* in plant material using novel polymerase chain reaction (PCR) primers. *NZJ Crop Hort Sci.* 29, 35-44 (2001).
 46. Maliepaard, C., Alston, F.H., van Arkel, G., Brown, L.M., Chevreau, E., Dunemann, F., Evans, K.M., Gardiner, S., Guilford, P. *et al* . Aligning male and female linkage maps of apple (*Malus pumila* Mill.) using multi-allelic markers. *Theoretical & Appl. Genet.* 97, 60-73 (1998).
 47. Dodé, C., Weil, D., Levilliers, J., Crozet, F., Chaib, H., Levi-Acobas, F., Guilford, P. and Petit, C. Sequence characterization of a newly identified human alpha tubulin gene (*TUBA2*). *Genomics*, 47 (1), 125-130 (1998).
 48. Guilford, P., Prakash, S., Zhu, J-M., Rikkerink, E., Gardiner, S., Bassett, H. and Forster, R. Microsatellites in *Malus X domestica* (apple): abundance, polymorphism and cultivar identification. *Theoretical & Appl. Genet.* 94, 249-254 (1997).

49. Guilford, P., Dode, C., Crozet, F., Blanchard, S., Chaib, H., Levilliers, J., Levi-Acobas, F., Weil, D., Weissenbach, J., Cohen, D., Le Páslier, D., Kaplan, J.-C. and Petit, C. A YAC contig and an EST map in the pericentromeric region of chromosome 13q surrounding the loci for neurosensory non-syndromic deafness ((DFNB1 and DFNA3) and the limb-girdle muscular dystrophy type 2C (LGMD2C). *Genomics*, 29, 163-169 (1995).
50. Weil, D., Blanchard, S., Kaplan, J., Guilford, P., Gibson, F., Walsh, J., Mburu, P., Valera, A., Levilliers, J., Weston, M., Kelley, P., Kimberling, W., Wagenaar, M., Levi-Acobas, F., Larget-Piet, D., Munnich, A., Steel, K., Brown, S. and Petit, C. Defective myosin V11A gene responsible for Usher syndrome IB. *Nature*, 374, 60-61 (1995).
51. Chaib, H., Lina-Granade, G., Guilford, P., Planchu, H., Levilliers, J., Morgon, A., and Petit, C. A gene responsible for a dominant form of neurosensory non-syndromic deafness maps to the NSRDI recessive deafness gene interval. *Human Molecular Genetics*, 3, 2219-2222 (1994).
52. Guilford, P., Ayadi, H., Blanchard, S., Chaib, H., Le Paslier, D., Weissenbach, J. and Petit, C. A human gene responsible for neurosensory, nonsyndromic recessive deafness is a candidate homologue of the mouse *sh1* gene. *Human Molecular Genetics*, 3, 989-993 (1994).
53. Guilford, P., Ben Arab, S., Blanchard, S., Levilliers, J., Weissenbach, J., Belkahia, A. and Petit, C. A non-syndromic form of neurosensory, recessive deafness maps to the pericentromeric region of chromosome 13q. *Nature Genetics*, 6, 24-28 (1994).
54. Bayne, R., Taggart, M.T., Farr, C., Petit, C., Guilford, P., Toniolo, D., Sala, C. and Cooke, H.J. An analysis of Xq breakpoints created by telomere-associated chromosome fragmentation. *Cytogenet. Cell Genet.* 64, (3-4) 175-175 (1993).
55. Forster, R.L.S., Beck, D.L., Guilford, P.J., Voot, D.V. and Andersen, M.T. The coat protein of white clover mosaic potexvirus has a role in facilitating cell to cell transport in plants. *Virology*, 191, 480-484 (1992).
56. Beck, D.L. Guilford, P.J., Voot, D.V. Andersen, M.T. and Forster, R.L.S. Triple gene block proteins of white clover mosaic potexvirus are required for transport. *Virology*, 183, 695-702 (1991).
57. Guilford, P.J., Ziegler-Graff, V. and Baulcombe, D.C. Mutation and replacement of the 16kDa protein gene of tobacco rattle virus. *Virology*. 182, 607-614 (1991).
58. Guilford, P.J., Beck, D.L. and Forster, R.L.S. Influence of the poly (A) tail and putative polyadenylation signal on the infectivity of white clover mosaic potexvirus. *Virology*, 182, 61-67 (1991).
59. Ziegler-Graff, V., Guilford, P.J., and Baulcombe, D.C. Tobacco rattle virus RNA-1 29K gene product potentiates viral movement and also affects symptom induction in tobacco. *Virology*, 182, 145-155 (1991).
60. Harbison, S.A., Forster, R.L.S., Guilford, P.J., and Gardner, R.C. Organisation and intervirial homologies of the coat protein gene of white clover mosaic virus. *Virology*, 162, 459-465 (1988).
61. Forster, R.L.S., Guilford, P.J. and Faulds, D.V. Characterisation of the coat protein subgenomic RNA of white clover mosaic virus, *Journal of General Virology*, 68, 181-190 (1987).

62. Guilford, P.J., and Forster, R.L.S. Detection of polyadenylated subgenomic RNAs in leaves infected with the potexvirus daphne virus X. *Journal of General Virology*, 67, 83-90 (1986).

Published proceedings

63. Proceedings of the 4th International gastric cancer congress. The inherited susceptibility to gastric cancer. 2001 pp41-52; eds M.F. Brennan and M.S. Karpeh; Monduzzi Editore, Bologna.
64. AAABG meeting; Queenstown 2001. "Lessons from gene discovery in humans".

Non-refereed publications

- Humar B, Fukuzawa R, Blair V, Dunbier A, More H, Charlton A, Reeve A, Martin I, Guilford P. The early development of diffuse gastric cancer. *Differentiation* 2006, 74: 455 O25

SELECTED CONFERENCE ORAL PAPERS

Invited International Conference Papers

1. Hereditary Diffuse Gastric Cancer Workshop. **Cambridge UK**, November 2008. "HDGC: The New Zealand experience".
2. British Association of Surgical Oncology, **London**, November 2007. "The clinical management of Hereditary diffuse gastric cancer".
3. Japanese Cancer Association Annual Meeting. **Yokohama**, October, 2007. "Hereditary Diffuse Gastric Cancer".
4. Upper Gastrointestinal Malignancies Symposium, Sloan Kettering Memorial Hospital, **New York**, 8th September, 2007. Keynote address: "Hereditary diffuse gastric cancer".
5. Global Trends in Cancer Research, **Tokyo**, July 2004. "The natural history and clinical management of hereditary diffuse gastric cancer"
6. 13th Cancer Research Institute Symposium: Molecular changes in gastric cancer and their clinical implications. **Seoul**, April 2004. "Gene: environment interactions in gastric cancer"
7. 17th International Symposium of Foundation for Promotion of Cancer Research: Recent Advances in Gastric Cancer, **Tokyo**, March, 2004. "The initiation and progression of hereditary diffuse gastric cancer"
8. Technical University, **Munich**. May 2003. "Premalignant and early neoplastic gastrointestinal lesions"
9. Institute of Pathology and Immunology, Gastric Cancer symposium, **Porto**, Portugal, May 2002. "The development of hereditary diffuse gastric cancer"
10. Aichi Cancer symposium, **Nagoya**, Japan, March 2002. "E-cadherin germline mutations in familial gastric cancer"
11. AACR conference; Molecular mechanisms of gastrointestinal cancer development. **Seoul** September 2001. "Inherited susceptibility to gastric cancer: Mechanisms and management"
12. IVth Gastric Cancer Congress; Plenary Lecture. **New York**, May 2001. "The inherited susceptibility to gastric cancer"
13. Hanson Symposium, **Adelaide**, November 2000. "Hereditary diffuse gastric cancer"
14. 5th Hereditary Tumor Course; Seoul National University, **Seoul**, Korea, August 1999.
15. Third Peter Mac Symposium. Initiation and progression of cancer. "The inherited susceptibility to diffuse gastric cancer". **Melbourne**, November 1999.
16. The International Agency for Research on Cancer meeting on "Cell Adhesion and Communication in Growth Control and Cancer"; **Lyon**, France, January 1999.
17. KConFab Breast Cancer Consortium Meeting. Address on "Founder Genes"; **Melbourne**, July 1998.
18. The 89th Annual American Association for Cancer Research Meeting, **New Orleans**, March 1998.

19. 10th Annual Lorne Cancer Conference, Lorne, Australia, February 1998.

Invited New Zealand Conference Papers

1. Innov'08. Wellington November 2008. From clinical need to clinical use: new diagnostic tests and personalized medicine for cancer management.
2. Queenstown Molecular Biology Meeting, September 2008. "Gastric cancer stem cells".
3. NZ Institute of Medical Laboratory Science; Dunedin August 2008. "The genetics of bowel cancer".
4. New Zealand Organisation for Rare Diseases; Wellington, November 2007. "Hereditary Diffuse Gastric Cancer".
5. Ngai Tahu Research Meeting on human genetics; Dunedin, August 2007. "The inherited stomach cancer project: genetic testing for cancer".
6. Australasian Society of Genetic Counsellor, Annual Conference, Auckland July 16th 2007. "The gastric cancer story-an example of cross-cultural collaboration."
7. NZ Bio Annual Conference, Auckland, March 2007. 'Genomics and the improved detection and management of cancer'.
8. Medical Sciences congress; Rotorua. "Decreasing the cancer burden: translational cancer genomics". Plenary Address, 28th Nov. 2006.
9. NZ Bio Annual Conference, Auckland, Feb 2006. "Urine test for bladder cancer".
10. New Zealand Bioethics conference, Dunedin, February 2004. "Commercialisation of Cancer Research"
11. NZ Biotechnology Association Annual Meeting, October 2003. "Cancer unravels: the commercial development of genomics to cancer drug and diagnostic development"
12. NZ HGSA meeting; Dunedin, August 2001. "Hereditary diffuse gastric cancer"
13. AAABG meeting, Queenstown, May 2001. "Lessons from gene discovery in humans"
14. Combio 2000, Cancer symposium. Wellington, Dec 2000. "Hereditary diffuse gastric cancer"
15. The Royal Australian College of Physicians; Rotorua, August 1999
16. NZ Gastroenterology Society; Wairekei, November 1999. "Genetics of gastric cancer".
17. New Zealand Institute of Medical Laboratory Science. Palmerston North September 1998.
18. Novartis Science in Medicine Lecture Series; "Inherited Stomach Cancer" Dunedin, August 1998.
19. The 8th Annual Queenstown Molecular Biology Meeting. Queenstown, August 1998.
20. New Zealand Society for Gastroenterology Annual Meeting, Dunedin, November 1997.

Proffered conference papers

1. New Zealand Society for Oncology Annual Scientific Meeting. Wellington June 2005. "The initiation of hereditary diffuse gastric cancer and its clinical management".

University/departmental seminars

1. Department of Pathology, University of Hong Kong, **Hong Kong**, November 2008. "The molecular basis of HDGC and its clinical management".
2. Kyoto University Hospital, **Kyoto**, Japan, October 2007. "Markers for bladder cancer".
3. Centre for Immunology and Cancer Research, University of Queensland, **Brisbane**; April 2005. "The onset and progression of hereditary diffuse gastric cancer".
4. Kyoto University Hospital, **Kyoto**, Japan, April 2004. "Microarray gene expression analysis of bladder cancer and marker development".
5. Kyoto University Hospital, **Kyoto**, Japan, November 2003. "Markers for bladder cancer".
6. University of **Urbino**, Italy, May 2003. Hereditary diffuse gastric cancer".
7. Paediatrics Dept, University of Otago, June 2002. "Hereditary diffuse gastric cancer".
8. Zoology Dept, University of Otago, March 2002. "The identification of a cancer susceptibility gene in a large Maori kindred".
9. Tokyo Cancer Centre, **Tokyo**, Japan, February 2002. Hereditary diffuse gastric cancer"
10. Kyoto University Hospital, **Kyoto**, Japan, February 2002. "Hereditary diffuse gastric cancer"
11. Lerner Institute, Cleveland Clinic, **Cleveland**, USA; May 2001.

Other oral presentations and public lectures

1. Auckland Regional Cancer Network. Inaugural lecture. September 2008. "Hereditary Diffuse gastric cancer: "cause, consequence and confidence."
2. Queenstown Molecular Biology Meeting. September 2007. Debate: 'the balance between targeted and basic research'.
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